

Remarks

The various parts of the Office Action (and other matters, if any) are discussed below under appropriate headings.

Claim Rejections - 35 USC § 102 and § 103

Claims 1 - 2

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,545,191 to *Mann et al.* (hereinafter *Mann*) or, in the alternative, under 35 U.S.C. 103(a) as obvious over *Mann* in view of U.S. Patent No. 5,769,778 to *Abrams et al.* (hereinafter *Abrams*). Withdrawal of the rejection is respectfully requested for at least the following reasons.

Claim 1 has been amended herein and recites a device for non-invasively stimulating specific areas of the brain, including a non-invasive induction device, and at least one marker connected to the non-invasive induction device. This is advantageous, for example, in that the patient can be examined and/or treated without performing a surgical procedure on the patient.

Claim 1 in view of Mann

Mann discloses a method for positioning and securing a device, such as a stimulator, on a living body. With reference to Figs. 1 and 2 of *Mann*, the stimulator includes two units; an implanted unit 12, which is surgically implanted beneath the skin, and an external unit 15, which is disposed to transmit electronic representations of sound waves detected and encoded by a sound processor to the implanted unit 12.¹ The implanted unit 12 can include markers, such as metal strips, which can be used to locate the implanted unit 12 under the skin.²

¹ Column 3, lines 12-19 of *Mann*

² Column 6, lines 6-11 of *Mann*

Thus, *Mann* does not teach or suggest a stimulator that is *non-invasive*. Instead, *Mann* discloses that a portion of the stimulator (the implanted unit 12) must be surgically implanted under the skin. Additionally, the markers disclosed in *Mann* are coupled to the implanted unit and, therefore, such markers are not coupled to a non-invasive induction device, as recited in claim 1.

The Examiner appears to have equated the Velcro strips fixed to the skin as the markers recited in claim 1.³ Applicants note, however, that the Velcro strips referred to by the Examiner are fixed to the skin and not to the induction device. Additionally, nowhere does *Mann* teach or suggest that these Velcro strips can be detected by a tracking system.

Accordingly, withdrawal of the rejection of claim 1 with respect to *Mann* is respectfully requested.

Claim 1 in view if Mann and Abrams

As was noted above, *Mann* does not disclose markers connected to the non-invasive induction unit. The Examiner admits that *Abrams* does not disclose markers connected to the induction device.⁴ Thus, *Mann* in view of *Abrams* does not teach or suggest at least one marker connected to the non-invasive induction device, as recited in claim 1. The remaining art (*He* and *Edrich*) does not make up for the deficiencies in *Mann* and *Abrams*.

Accordingly, withdrawal of the rejection of claim 1 with respect to *Mann* in view of *Abrams* is respectfully requested.

Claim 2 depends from claim 1 and therefore can be distinguished from the cited art for at least the same reasons.

³ See page 2 of the Office Action, item 3

⁴ Page 2, section 3, second paragraph of the Office Action

Accordingly, withdrawal of the rejection of claim 2 is respectfully requested.

Claim 3 - 13

Claims 3-13 are rejected under 35 U.S.C. 103(a) as obvious over *Mann* in view of *Abrams* and U.S. Patent No. 6,014,582 to *He*. Withdrawal of the rejection is respectfully requested for at least the following reasons.

Claim 3 recites a system for stimulating specific areas of the brain, including a simulation device which determines the area of stimulation in the brain to be stimulated by the induction device. This is advantageous, for example, in that a user is guided by the system to the precise location on the patient for optimal treatment, thereby minimizing errors in the user's judgment.

He discloses a system for measuring, analyzing and visualizing electrical activities in a biological system. More specifically, *He* discloses how the resolution of spatial information obtained from electrical recordings can be improved. A first method involves "counter-filtering characteristics of surface differentials of the potential with combining using the electrical potential with surface differentials of the potential". A second method uses spatial deconvolution for reconstructing brain electrical activity over the brain surface from the scalp potential recordings in a realistically shaped inhomogeneous head model using the boundary element technique.⁵

He repeatedly discloses how data relating to the biological system can be displayed and/or sent to a disk for storage. *He*, however, does not teach or suggest how such data can be used to determine *an area of stimulation in the brain to be stimulated by the induction device*, as recited in claim 3. *Mann*, *Abrams* and *Edrich* do not make up for the deficiencies in *He*.

Accordingly, withdrawal of the rejection of claim 3 is respectfully requested.

⁵ Column 4, line 61 - column 5, line 4 of *He*

Claims 4-13 directly or indirectly depend from claim 3 and, therefore, can be distinguished from the cited art for at least the same reasons.

Accordingly withdrawal of the rejection of claims 4-13 is respectfully requested.

Conclusion

In view of the foregoing, request is made for timely issuance of a notice of allowance.

Respectfully submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP

By 
Kenneth W. Fafrak, Reg. No. 50,689

1621 Euclid Avenue
Nineteenth Floor
Cleveland, Ohio 44115
(216) 621-1113

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